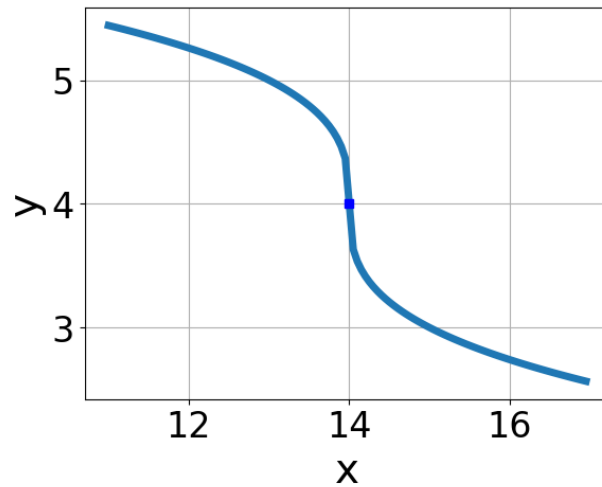
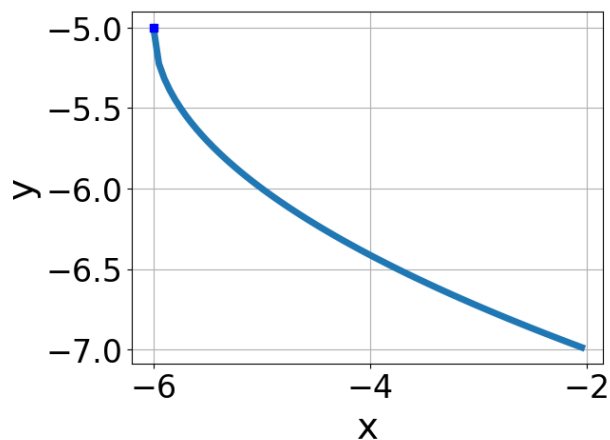


1. Choose the equation of the function graphed below.



- A. $f(x) = -\sqrt{x+14} + 4$
B. $f(x) = \sqrt{x+14} + 4$
C. $f(x) = -\sqrt{x-14} + 4$
D. $f(x) = \sqrt{x-14} + 4$
E. None of the above

-
2. Choose the equation of the function graphed below.



- A. $f(x) = -\sqrt{x+6} - 5$
B. $f(x) = -\sqrt{x-6} - 5$

- C. $f(x) = \sqrt{x+6} - 5$
D. $f(x) = \sqrt{x-6} - 5$
E. None of the above
-

3. Solve the radical equation below. Then, choose the interval(s) that the solution(s) belongs to.

$$\sqrt{21x^2 + 36} - \sqrt{-55x} = 0$$

- A. $x_1 \in [1.26, 1.43]$ and $x_2 \in [-0.67, 6.33]$
B. All solutions lead to invalid or complex values in the equation.
C. $x \in [-1.35, -1.29]$
D. $x \in [-1.29, -1.27]$
E. $x_1 \in [-1.35, -1.29]$ and $x_2 \in [-4.29, -0.29]$
-

4. Solve the radical equation below. Then, choose the interval(s) that the solution(s) belongs to.

$$\sqrt{-3x+2} - \sqrt{9x-8} = 0$$

- A. $x_1 \in [0.6, 0.71]$ and $x_2 \in [0.81, 0.86]$
B. $x_1 \in [0.6, 0.71]$ and $x_2 \in [0.86, 0.95]$
C. $x \in [0.7, 0.94]$
D. $x \in [-0.52, -0.37]$
E. All solutions lead to invalid or complex values in the equation.
-

5. What is the domain of the function below?

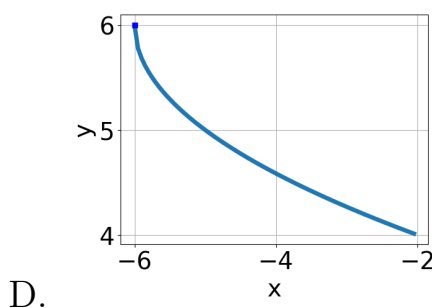
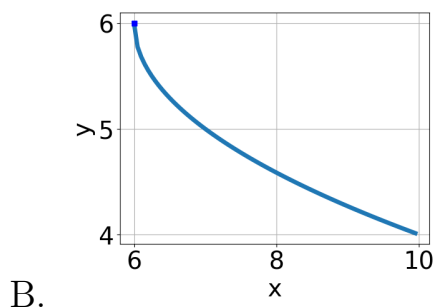
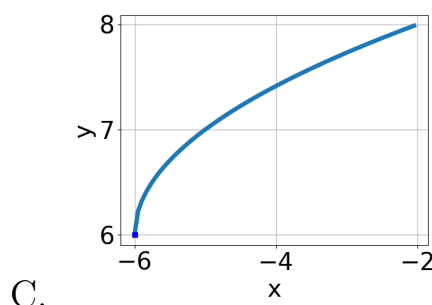
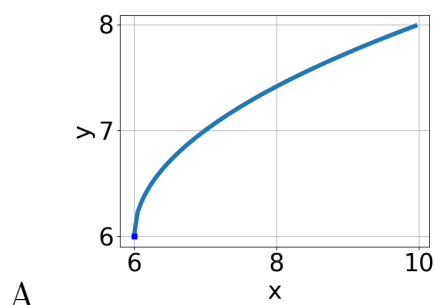
$$f(x) = \sqrt[7]{-9x-8}$$

- A. The domain is $(-\infty, a]$, where $a \in [-1.58, -0.89]$

- B. The domain is $[a, \infty)$, where $a \in [-1.41, -0.9]$
- C. The domain is $[a, \infty)$, where $a \in [-1.07, -0.53]$
- D. $(-\infty, \infty)$
- E. The domain is $(-\infty, a]$, where $a \in [-1.12, -0.1]$

6. Choose the graph of the equation below.

$$f(x) = \sqrt{x - 6} + 6$$



E. None of the above.

7. What is the domain of the function below?

$$f(x) = \sqrt[7]{8x - 9}$$

- A. $(-\infty, \infty)$
- B. The domain is $(-\infty, a]$, where $a \in [1.03, 2.09]$
- C. The domain is $(-\infty, a]$, where $a \in [0.88, 0.92]$
- D. The domain is $[a, \infty)$, where $a \in [0.86, 1.12]$

E. The domain is $[a, \infty)$, where $a \in [1.11, 1.38]$

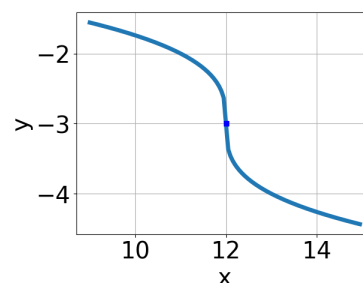
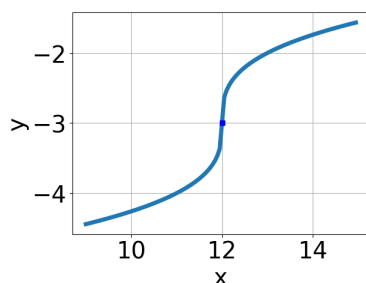
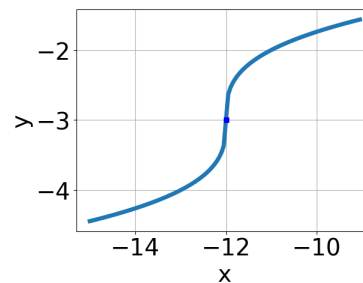
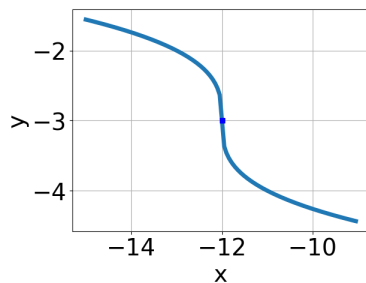
8. Solve the radical equation below. Then, choose the interval(s) that the solution(s) belongs to.

$$\sqrt{18x^2 + 40} - \sqrt{-61x} = 0$$

- A. $x_1 \in [-3.63, -1.99]$ and $x_2 \in [-3.89, 0.11]$
 B. $x \in [-1.96, -0.45]$
 C. $x_1 \in [-0.22, 1.61]$ and $x_2 \in [2.5, 3.5]$
 D. All solutions lead to invalid or complex values in the equation.
 E. $x \in [-3.63, -1.99]$

9. Choose the graph of the equation below.

$$f(x) = \sqrt[3]{x + 12} - 3$$



- E. None of the above.

10. Solve the radical equation below. Then, choose the interval(s) that the solution(s) belongs to.

$$\sqrt{7x + 5} - \sqrt{-3x - 9} = 0$$

- A. $x_1 \in [-3.4, -2.8]$ and $x_2 \in [-2.71, 4.29]$
 - B. $x_1 \in [-1.6, -0.3]$ and $x_2 \in [-2.71, 4.29]$
 - C. $x \in [-1.6, -0.3]$
 - D. All solutions lead to invalid or complex values in the equation.
 - E. $x \in [-1.1, 0.5]$
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